

## FACTS ABOUT

## Truck and Bus Regulation Motorcoach Provisions

*Less stringent requirements for motorcoaches*

On December 12, 2008, the California Air Resources Board approved a new regulation to significantly reduce particulate matter or PM and oxides of nitrogen or NOx emissions from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance requirements between 2011 and 2023. By January 1, 2023, all vehicles must have a 2010 model year engine or equivalent. The following describes the more flexible compliance options available for motorcoaches.

### What does the regulation require?

Fleet owners can comply with the general requirements of the regulation by meeting any one of three compliance options. The options provide alternative methods to phase-in the best available control technology or BACT to reduce NOx and PM.

- Fleets can meet the PM BACT requirements by installing the highest level PM exhaust filter on existing engines, or with vehicles that are originally equipped with PM filters.
- Fleets can meet the NOx BACT (and PM BACT) requirements with engines manufactured to the 2010 model year or newer engine emissions standard.
- Fleets can use other methods that achieve the same emissions reductions from existing engines and can take advantage of various provisions in the regulation.
- For information on how to comply with the general requirement of the regulation, see the Truck and Bus compliance fact sheet at [www.arb.ca.gov/dieseltruck](http://www.arb.ca.gov/dieseltruck) and click on the "Factsheet and Advisory" button.

### What are the provisions for motorcoaches?

Motorcoaches remain subject to the same PM BACT requirements as other vehicles, but are exempt from the NOx BACT requirements until 2017. The NOx BACT requirements are also phased-in more gradually after 2017. Annual reporting is required with all three compliance options if utilizing the motorcoach provisions.

### What compliance options do motorcoach fleets have?

Motorcoach fleets can utilize any of the three compliance options listed below. A mixed fleet with motorcoaches and other vehicles can take advantage of the motorcoach provisions while utilizing any of the three compliance options; however, the fleet must include all vehicles in the same compliance option to meet NOx BACT requirements. Like other fleets, a mixed fleet can use any of the three compliance options to meet PM BACT requirements. The following compliance options show the requirements that apply to motorcoaches:

Engine Model Year	Requirement by January 1	
	Motorcoaches	Other Vehicles
Pre-1994	PM BACT by 2011 and 2010 engine emissions by 2017	PM BACT by 2011 and 2010 engine emissions by 2015
1994-1999	PM BACT by 2013 and 2010 engine emissions by 2017	2010 engine emissions by 2013
2000-2002	PM BACT by 2014 and 2010 engine emissions by 2017	2010 engine emissions by 2014
2003-2004	PM BACT by 2012 and 2010 engine emissions by 2017	PM BACT by 2012 and 2010 engine emissions by 2016
2005-2006	PM BACT by 2013 and 2010 engine emissions by 2017	PM BACT by 2013 and 2010 engine emissions by 2017
2007	2010 engine emissions by 2021	2010 engine emissions by 2021
2008	2010 engine emissions by 2022	2010 engine emissions by 2022
2009	2010 engine emissions by 2023	2010 engine emissions by 2023

### Option 1 – BACT Schedule

The BACT schedule specifies the action required based on the existing engine model year and is shown in Table A. Any fleet that meets all of the requirements in the column labeled "Other Vehicles" do not need to report and are considered to be ahead of the regulation. All other fleets that utilize any of the special provisions in the regulation, including the motorcoach provisions, must report annually.

Compliance by January 1	All Vehicles PM BACT	Motorcoaches MC NOx BACT	Other Vehicles NOx BACT
2011	25%	NA	NA
2012	50%	NA	NA
2013	75%	NA	25%
2014	100%	NA	50%
2015	100%	NA	50%
2016	100%	NA	60%
2017	100%	50%	80%
2018	100%	50%	80%
2019	100%	50%	80%
2020	100%	50%	90%
2021	100%	90%	90%
2022	100%	90%	90%
2023	100%	100%	100%

### Option 2 - BACT Percentage Limits

The BACT percentage limits criteria for motorcoaches and other vehicles are listed in Table B. With this option, motorcoaches and all other vehicles must meet the same PM BACT percentage requirement. However, motorcoaches must meet the less stringent MC NOx BACT percentage requirement and all other vehicles in the fleet must meet the NOx BACT percentage requirement.

### Option 3 - Fleet Average

The fleet average option allows a fleet to gradually reduce their fleet emissions by meeting a fleet average emissions target for PM and one for NOx. The emissions factors for motorcoaches are the same as for

heavy trucks; however, the target emissions rate, or goal, for motorcoaches is less stringent. The average emissions calculated for the fleet must be less than or equal to the targets specified in the regulation for each compliance year.

### What kind of bus is eligible for the motorcoach provisions?

The regulation defines a motorcoach as an on-road motor vehicle having an under floor luggage compartment separate from the passenger cabin used for conveying passengers, that is at least 35 feet in length, and is designed for and has seating capacity for 40 or more passengers.

Motorcoaches owned by public agencies for fixed route transit service and motorcoaches under contract with public agencies for fixed route transit service are not subject to the Truck and Bus regulation but are subject to the Public Transit Agency regulation (title 13, California Code of Regulations, section 2023). Additional fact sheets and information are available at [www.arb.ca.gov/msprog/bus/bus.htm](http://www.arb.ca.gov/msprog/bus/bus.htm).

### What if a diesel retrofit is not available or can not be safely installed?

Fleet owners may request a one-year extension from meeting PM BACT if all other vehicles in the fleet meet PM BACT, and a highest level PM exhaust filter is not available for your engine or cannot be physically or safely installed as determined by the installer. An extension may be granted annually until January 1, 2018 provided the conditions for the extension remain the same. Starting January 1, 2018, any vehicle that still has not been equipped with a PM filter must be replaced or have its engine replaced with an engine that can be equipped with the highest level PM exhaust filter.

For more information on or how to install a PM exhaust retrofit or on ARB's verification procedure for PM exhaust retrofits, go to ARB's webpage at: [www.arb.ca.gov/msprog/decsinstall/decsinstall.htm](http://www.arb.ca.gov/msprog/decsinstall/decsinstall.htm).

### Will these provisions change as part of ARB's upcoming revisions to the Truck and Bus regulation?

No amendments are planned for the motorcoach provisions; however the modifications to the regulation have not been finalized. Staff's final proposal is scheduled to be posted in early August at ARB's webpage.

### Where can I find more information about the regulation?

Additional fact sheets and information are available at [www.arb.ca.gov/dieseltruck](http://www.arb.ca.gov/dieseltruck) or speak to an ARB representative by calling (866) 6DIESEL (866-634-3735) or email to [8666diesel@arb.ca.gov](mailto:8666diesel@arb.ca.gov).

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